



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/783,230	02/19/2004	Alan F. Jankowski	IL-10692B	7425

7590

12/09/2004

Ann M. Lee
ATTORNEY
L-703
P.O. Box 808
Livermore, CA 94551

EXAMINER

WALKER, KEITH D

ART UNIT	PAPER NUMBER
----------	--------------

1745

DATE MAILED: 12/09/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/783,230

Applicant(s)

JANKOWSKI ET AL.

Examiner

Keith Walker

Art Unit

1745

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 February 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☒ Claim(s) 2,3,5,6,8 and 9 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 February 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Priority

1. This application is a divisional of Application No. 09/906,913 filed on July 16, 2001, which matured to US Patent 6,753,036. Application needs to be corrected to reflect current status.
2. Claim to the priority date of Application No. 09/906,913 is not perfected since reference to the prior application was not noted in the first sentence.

Information Disclosure Statement

3. An Information Disclosure Statement has not been filed as of the writing of this office action.

Drawings

4. Figure 1 is objected to for not showing reference number (2) as referred to in paragraphs [0020] & [0021].
5. Figure 2 is objected to for not showing reference number (14) as referred to in paragraph [0022].
6. Figure 5 is objected to for not showing reference number (12) as referred to in paragraph [0024].

Specification

7. Applicant has not complied with one or more conditions for receiving the benefit of an earlier filing date under 35 U.S.C. 120 as follows:

An application in which the benefits of an earlier application are desired must contain a specific reference to the prior application(s) in the first sentence of the

specification or in an application data sheet (37 CFR 1.78(a)(2) and (a)(5)). The specific reference to any prior nonprovisional application must include the relationship (i.e., continuation, divisional, or continuation-in-part) between the applications except when the reference is to a prior application of a CPA assigned the same application number.

8. This application is a divisional of Application No. 09/906,913 filed on July 16, 2001, which matured to US Patent 6,753,036. Application needs to be corrected to reflect current status.

9. Applicant is reminded of the proper content of an abstract of the disclosure. The current Abstract describes a method of making an electrode for a fuel cell, while the claimed invention is to the electrode itself. Appropriate action is required.

10. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

The following title is suggested: Electrode with pore size distribution.

Claim Objections

11. Claims 2-3, 5-6, & 8-9 are objected to because of the following informalities: each of the claims refers to/are dependent on claims 10, 13, & 16 respectively, which do not exist. Examiner is inferring the claim references of 10, 13, & 16 to be claims 1, 4, & 7 respectively. Appropriate correction is required.

Claim Rejections - 35 USC § 102/103

12. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

13. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

14. Claims 1-9 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over US Patent 5,114,803 (Ishihara).

Regarding claims 1, 4, & 7 Ishihara discusses a fuel cell with a porous electrode (Col 2, ll. 5-7), where the pore diameters are substantially uniform (Col. 7, ll. 19-20). There is a reasonable expectation that the term substantially uniform teaches of pores having a substantially uniform pore distribution and thus fall within the instant claimed pore distribution range, absent clear evidence to the contrary. Therefore it is held that the prior art anticipates the claimed range. In the alternative, it would have been obvious to one skilled in the art at the time the invention was made to optimize the uniformity of the pore diameters in order to keep even distribution of air through the electrode and improve the function of the battery. "[W]here the general conditions of a claim are disclosed in the prior art, it is not inventive to discover the optimum or

Art Unit: 1745

workable ranges by routine experimentation." In re Aller, 220 F.2d 454, 456, 105 USPQ 233, 235 (CCPA 1955). Generally, differences in ranges will not support the patentability of subject matter encompassed by the prior art unless there is evidence indicating such ranges are critical. In re Boesch, 617 F.2d 272, 205 USPQ 215 (CCPA 1980). The fuel stack of claim 7 is a combination of multiple fuel cells, and a duplication of parts has no patentable significance unless a new and unexpected result is produced. In re Harza, 274 F.2d 669, 124 USPQ 378 (CCPA 1960).

Regarding claims 2, 6, & 9, Ishihara describes pore diameters of 0.7 μ m, 1.3 μ m, & 8.5 μ m (Table 1).

Regarding claims 3, 5, & 8, the pore diameter of the electrode varies to progressively change from one surface of the electrode to the other surface (Col. 4, ll. 53-55). Further, the ratio of the pore diameters from each surface vary from 100:1 to 5:1 (Col. 4, ll. 39-42).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Keith Walker whose telephone number is 571-272-3458. The examiner can normally be reached on Mon. - Fri. 8am - 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Ryan can be reached on 571-272-1292. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 1745

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

kdw

Gregg Cantelmo
Gregg Cantelmo
Primary Examiner
A.U. 1745